

7447



HRS NARRATIVE SUMMARY
Richardson Flat Tailings
Park City, Utah

37952

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Richardson Flat Tailings lies within the northwest quarter of Section 1 and the northeast quarter of Section 2, Township 2 South, Range 4 East, Summit County, Utah. The tailings cover an area of approximately 160 acres within a topographic depression located one and a half miles from most recent development in the town of Park City.

The mill tailings at Richardson Flat came from the Keetley Ontario Mine and other metal mining operations currently owned by United Park City Mines (UPCM). The most recent use of the area for tailings disposal was from 1975 to 1981. During this time UPCM had all its mining properties leased to either Park City Ventures or Noranda Mining, Inc., who constructed and operated milling facilities on UPCM properties. Two million tons of tailings is a conservative estimate of waste quantity on site.

The best information available on the local ground water regime indicates the presence of an alluvial aquifer (averaging 60 feet thick) underlain by consolidated rocks of Tertiary origin. Two domestic wells completed in Tertiary volcanics exist within three quarters of a mile of the site. Although an observed release (cobalt, manganese and zinc) to the alluvial aquifer was documented, the hydraulic communication to underlying water-bearing units is not known. The ground water route has therefore not been scored.

Elevated concentrations of arsenic, copper and lead were detected in the surface water sample from Silver Creek, collected downgradient of the tailings. Water diverted from Silver Creek is used to irrigate pastureland and hay production fields within three stream miles of the site.

High-volume air sampling was conducted at Richardson Flat Tailings to document an observed release of arsenic, cadmium, lead and zinc to the air migration pathway. The permanent year-round population residing within four miles of the tailings is approximately 4500.

The S_{dc} score of 12.50 does not adequately reflect the threat of contaminant exposure through direct contact. Although only three homes are located within one mile of the site, the tailings area is commonly used by motorcyclists for recreational purposes. In addition, air-borne tailings material blows across Highway 40 on a daily basis during the summer months.

The results of the hazard ranking are as follows: $S_m = 39.13$
 $(S_{gw} = 0; S_{sw} = 47.27; S_a = 48.46); S_{fe} = 0; S_{dc} = 12.50.$ The S_m
score exceeds the threshold value of 28.50 required for nomination to the National Priorities List.